(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



- I MARIA BANTAN KA KATAN BANTA BANTA BANTA BANTA KAN BANTA KANDA BANTA BANTA BANTA BANTA BANTA BANTA BANTA BA

(43) International Publication Date 18 March 2004 (18.03.2004)

PCT

(10) International Publication Number WO 2004/022673 A1

- (51) International Patent Classification⁷: C02F 11/10
- C10B 53/00,
- (21) International Application Number:

PCT/AU2003/001099

- (22) International Filing Date: 26 August 2003 (26.08.2003)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2002951194

4 September 2002 (04.09.2002) AU

- (71) Applicant (for all designated States except US): ENVI-RONMENTAL SOLUTIONS INTERNATIONAL LTD [AU/AU]; 21 Teddington Road, Victoria Park, Western Australia 6100 (AU).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BRIDLE, Trevor, Redvers [AU/AU]; 1B Primrose Street, Perth, Western Australia 6000 (AU). SKRYPSKI-MANTELE, Stefan [DE/DE]; 1 Hoffeldstrasse, Schenkenzell, 77773 (DE).

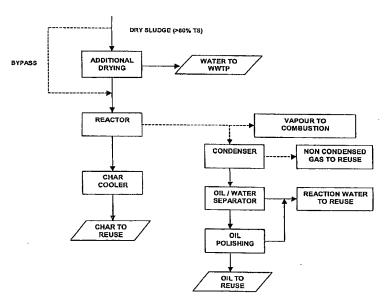
- (74) Agent: WRAY & ASSOCIATES; Level 4, The Quadrant, 1 William Street, Perth, Western Australia 6000 (AU).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CONVERSION OF SLUDGES AND CARBONACEOUS MATERIALS



(57) Abstract: A process for the conversion of sludges and carbonaceous materials, the process characterised by the steps of: (a) Heating the material to be converted in a heating zone of a reactor in the absence of oxygen for the volatilisation of oil producing vapours, thereby producing both a vapour product and a solid residue or char; (b) Contacting the vapour product and char in a reaction zone of the reactor at a determined Weight Hour Space Velocity ("WHSV") so as to promote vapour-phase catalytic reactions; and (c) Removing and separating the gaseous products and char from the reactor. An apparatus for the conversion of sludges and carbonaceous materials in accordance with the above process is also described.

